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EXAMINER	
TO, BAOQUOC N	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/957,459	ROACH ET AL.	
	Examiner	Art Unit	
	Baoquoc N. To	2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05/28/2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18 and 34-59* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18 and 34-59* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This communication is responsive to the Appeal Brief, filed 06/27/2007. Claims 1-18 and 34-59 are pending in this communication, and this office action is made non-final.

Reopening of Prosecution After Appeal Brief or Reply Brief

In view of the Appeal Brief filed on 06/27/2007, PROSECUTION IS HEREBY REOPENED. The new ground(s) of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

John E. Breene

JOHN BREENE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Response to Arguments

2. Applicant's arguments with respect to claims, filed on 06/27/2007, have been considered but are moot in view of the new ground(s) of rejection.

The Applicant argues "not a shred on evidence supports the Office Action's position that Koshisaka's API and the claimed operating system are the same."

The examiner respectfully disagrees with the above argument. Although, Koshisaka's API appears to be an interface between the applicant and operating system (col. 6, lines 32-40); however, API is a part of the operating system as disclosed by Parthasarathy (col. 5, lines 59-61). Therefore, detecting an instruction by an API or operating system is the same because API is a part of the operating system in Parthasarathy.

The applicant argues that "the office action must provide a written explanations as to why the Declaration is unpersuasive and does not overcome the rejection."

The examiner have provide the reason as to why the 1.132 Declaration of Steve William is ineffective because the 1.132 Declaration is an expert opinion (expert opinion what an application meet the requirement of 35 U.S.C 112 is not entitled to any weight; however, the facts supporting a basic for deciding that the specification complies with 35 U.S.C 112 are entitle to some weight). In this case, 1.132 Declaration of Steve William is an expert opinion without facts and any supporting evidences; therefore, the expert opinion does not entitle to all weight as indicated. In result, the 1.132 Declaration of Steve William is insufficient to over come the rejection of claim 1-18 and 34-59.

b. The rejection of claims 1-3, 9-12, 15 and 54-57 under 35 U.S.C 103(a)

Applicant argues "neither Koshisaka and Dunphy, taken alone or in combination, teach or discloses this detecting step."

The examiner provides the third reference which further teaches that the API as discloses in Koshisaka and Dunphy in a part of the Operating System as disclosed in Parthasarathy (col. 5, lines 59-61). Since API is a part of the Operating System; therefore, the detecting instruction by API or Operating System is the same. The motivation for the combination to allow the system to preserve an original copy in case the changes are made to the data in unintentional. [redacted]

c. The rejection of claims 34-38, 43-51and 57-59

Applicant argues "neither Dunphy nor Koshisaka, taken alone or in combination teach or suggest detection of an instruction by the operating system, in addition, Neither Dunphy nor Koshisaka teach storing an archive fie created from the operating system in a temporary first storage location responsive to detection of the operating system instruction."

Please see the earlier explanation for the detecting of an instruction by an operating system. Dunphy discloses log 12 to store the file changes by the monitor 11 (col. 3, lines 64-67) which same as storing the created file in the temporary first location.

l. Claim 44

Applicant argues "the cited portion does not provide the archive file pass through two storage location before ending up in permanent storage."

The examiner respectfully disagrees with the above argument. Dunphy discloses the copy before changes are logged into event log 12 and into data protection system 10, then eventually to a data file backup media 21 for storage (col. 4, lines 24-44).

d. The rejection of claims 4-8 and 13-14.

Applicants incorporate by reference the arguments advanced in support of patentability with respect to claim 1-3, 9-12, 15 and 54-57.

The same explanation from claim 1-3, 9-12, 15 and 54-57 are applied here as well.

e. The rejection of Claims 39-42

i. Claims 39-40

Applicant argues "Midgely does not suggest the claimed operation of searching a temporary storage location responsive to any type of notification is a message from a timer as in claim 39 or a message from a resident program as in claim 40."

The examiner respectfully disagrees with the above argument. Midgely teaches "the protected server's protection agent registers with the Netware file system's File system Monitor feature. This registration requests that the agent be notified when a client a requests a file open operation, prior to the file system's execution of the open operation" (col. 7, lines 59-63). This suggests the notification is the message from a timer or from the resident program.

ii. Claim 41 and 42

Applicant argues "Midgely does not teach moving an archive file responsive to a permanent storage location responsive to a timer message or a message indicating availability of the permanent storage location."

The examiner respectfully disagrees with the above argument. Midgely teaches "the protected server's protection agent registers with the Netware file system's File system Monitor feature. This registration requests that the agent be notified when a client a requests a file open operation, prior to the file system's execution of the open operation" (col. 7, lines 59-63). This suggests moving an archive file responsive to a permanent storage location responsive to a timer message or a message indicating availability of the permanent storage location

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 17 and 50 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 17 direct to a data transmission signal having computer program code, which is not fallen into one of the four status category classes. The data transmission signal direct to a signal or a form of energy.

Claim Objections

4. Claims 1, 34 and 59 are objected to because of the following informalities: claims 1, 34 and 59 claim "...temporally proximate to the operation being performed..." render indefinite because temporally proximate does not provide a particular time rather it is a rang of time. Therefore, for the purpose of examination the meaning of "...temporally proximate...' is being interpreted as before the operation being performed. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-18 and 54-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koshisaka (US. Patent No. 6,629,109 B1) in view of Dunphy et al. (US. Patent 5,638,509) and further in view of Parthasarathy et al. (US. Patent No. 7,117,371 B1).

Regarding on claim 1, Koshisaka teaches in computing device, a method for archiving files comprising:

Detecting an instruction by an operating system to perform an operation on an operating system (the file manipulation monitoring section 21 of the file revision management system 2 detects file manipulation which is going to be executed by the application 1 step Si...) (col. 6, lines 32-43); and

Although, Koshisaka does not explicitly teach capturing the operating file temporally proximate to the operation being performed on the operating file, responsive to the detection of the instruction. Koshisaka does not explicitly teach capturing the operating file temporally proximate to the operation being performed on the operating file, responsive to the detection of the instruction. However, Koshisaka teaches "the file manipulation monitoring section 201 constantly monitors API (Application Program Interface) commands which are outputted by the application 1 to the operating system 3 and thereby detects the file manipulation which is (going to be) executed by the application 1...In the case wherein the file manipulating is "file deletion" ("Yes" in the step S2), the file manipulation monitoring section 21 instructs the processing section 22 to store a "deleted file name" and a corresponding "backup file name" in the deleted file name memory section 23 (step 23). The deleted file name is the name of the file (to be) deleted by the application 1." (col. 6, lines 35-54).. This teaches the monitoring program send out the instruction to save the deleted file to the backup memory right at the time the program can execute the delete application. On the other hand, Dunphy also discloses capturing the operating file temporally proximate to the operation being performed on the operating file, responsive to the detection of the instruction (col. 3, lines 50-67 and col. 4, lines 1-10). Therefore, it would have been obvious to one

ordinary skill in the art at the time of the invention was made to modify Koshisaka's system to include storing the original file in the memory as taught in Koshisaka in order to allow the user to retrieve latter on when needed. Further more, the both of Koshisaka and Dunphy discloses detecting is done by an API and API is not a part of the Operating System. On the other hand, Parthasarathy discloses an API is a part of the Operating System (col. 5, lines 59-61). Since, API in Parthasarathy disclosed as a part of the operating system. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify the API of as disclosed in Parthasarathy to detect an instruction performing on as file as Koshisaka and Dunphy to generate a backup for later recovery.

Regarding on claim 2, Koshisaka teaches capturing the operating file includes creating an archive file and storing the archive file in a storage location (col. 6, lines 35-45).

Regarding on claim 3, Koshisaka teaches the archive file includes copy of the operating file (col. 6, lines 35-45).

Regarding on claim 4, Koshisaka does not explicitly teach the archive files includes portions of the operating file. However, Dunphy teaches "the data file monitor 11 creates entries in event log 12 that identifies the data directory/data file, the nature of the change, extent of the data file, the time that this change occurred and any other pertinent administrative information..." (col. 4, lines 33-37). This suggests the event log creating entry containing the changes of the file. Therefore, it would have been obvious

to one ordinary skill in the art at the time of the invention was made to modify Koshisaka's system to include the entry containing changes to the file as taught in Dunphy in order to provide the system retrieve and restore partial of the file in the event of users change their mind.

Regarding on claim 5, Koshisaka does not explicitly teach the archive file includes pointers directed to one or more storage locations, wherein each of the one or more second storage locations contains at least a portion of the operating file. However, Dunphy teaches "a database 14 located in the data storage and protection apparatus 10 retrieves the event log 12 and uses the information contain therein to identify data files that are to be transmitted to a data file backup media 21 for storage. The database also contains a complete history of all data file changes since it stores the event log entries in its history file" (col. 4, lines 41-46). This suggests the database 14 is the second storage having different entries of a file. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Koshisaka's system to include the entry containing changes to the file as taught by Dunphy in order to provide the system retrieve and restore partials of the file from the event log in the event of users change their mind.

Regarding on claim 6, Koshisaka does not explicitly teach capturing the file includes saving the archive file prior to the operation being performed on the operating file. However, Dunphy teaches "the data file monitor 11 creates entries in event log 12 that identifies the data directory/data file, the nature of the change, extent of the data file, the time that this change occurred and any other pertinent administrative

information..." (col. 4, lines 33-37). This suggests the event log creating entry containing the changes of the file, is the saving the archive file prior the executing the instruction. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Koshisaka's system to include the entry containing changes to the file as taught in Dunphy in order to provide the system retrieve and restore partial of the file in the event of users change their mind.

Regarding on claim 7, Koshisaka does not explicitly teach the file includes saving the archive file subsequent to detecting the instruction to perform the operation. However, Dunphy teaches "the data file monitor 11 creates entries in event log 12 that identifies the data directory/data file, the nature of the change, extent of the data file, the time that this change occurred and any other pertinent administrative information..." (col. 4, lines 33-37). This suggests the event log creating entry containing the changes of the file, is the saving the archive file prior the executing the instruction. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Koshisaka's system to include the entry containing changes to the file as taught in Dunphy in order to provide the system retrieve and restore partial of the file in the event of users change their mind.

Regarding on claim 8, Koshisaka does not explicitly teaches capturing the file includes saving the archive file subsequent to the operation being performed on the operating file. Dunphy teaches "the data file monitor 11 creates entries in event log 12 that identifies the data directory/data file, the nature of the change, extent of the data file, the time that this change occurred and any other pertinent administrative

information..." (col. 4, lines 33-37). This suggests the event log creating entry containing the changes of the file, is the saving the archive file prior the executing the instruction. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Koshisaka's system to include the entry containing changes to the file as taught in Dunphy in order to provide the system retrieve and restore partial of the file in the event of users change their mind.

Regarding on claim 9, Koshisaka teaches the storage location includes a buffer (col. 5, lines 55-65).

Regarding on claim 10, Koshisaka teaches the first storage location includes a storage device (col. 6, lines 32-65).

Regarding on claim 11, Koshisaka teaches the storage device includes at least one of a group comprising a magnetic storage medium, an optical storage medium, and a solid state storage device (col. 6, lines 32-65).

Regarding on claim 12, Koshisaka teaches the storage location includes a directory disposed on said storage device (col. 6, lines 32-65).

Regarding on claim 13, Koshisaka doest not explicitly teach determining whether the operating file has previously been captured prior to capturing the file. However, Dunphy teaches "if a data change is detected, at step 34, the data file monitor 11 extracts data file status an activity information from the received communications and uses this data to maintain an event log 12 indicate a history of all presently occurring data file activity on the computer system1..." (col. 3, lines 64-67 to col. 4, lines 1-21). This suggests that the event log 12 storing the file prior the change made to the file.

Therefore, would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Koshisaka's system to include the entry containing changes to the file as taught in Dunphy in order to provide the system retrieve and restore partial of the file in the event of users change their mind.

Regarding on claim 14, Koshisaka teaches determining whether the operating file has previously been captured prior to capturing the file (col. 6, lines 32-65).

`Regarding on claim 15, Koshisaka teaches the operation causes a change in the operating file (col. 5, lines 32-65).

Claims 16-18 are rejected under the same reason as to claim 1.

Claim 54 is rejected same reason as claim 1, the command is intercepted by the API prior to execute the command (col. 6, lines 32-43).

Regarding on claim 55, Koshisaka teaches the method recited in claim 54, wherein said capturing occurs an instant before (the file manipulation monitoring section 21 of the file revision management system 2 detects file manipulation which is going to executed by the application 1 step Si) (col. 6, lines 32-35) or after the operation is performed on the operating file.

Regarding on claim 56, Koshisaka does not explicitly teach the method recited in claim 54, wherein the operating file is a system file (file system) (col. 10, lines 38-42).

Regarding on claim 57, Koshisaka teaches the method recited in claim 54, wherein the operating file is a user file (user file) (col. 6, lines 5-43).

6. Claims 34-38, 43-51 and 57-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunphy (US. Patent No. 5,638,509) further in view Koshisaka (US. Patent No. 6,629,109 B1) and further in view of Parthasarathy et al. (US. Patent No. 7,117,371 B1).

Regarding on claim 34, Dunphy teaches in a computing device, a method for archiving files comprising:

Detecting an instruction by an operating system to perform an operation on an operating file (application program resident on the computer system to intercept all communication therebetween) (col. 1, lines 60-61);

Searching the first temporary storage location for the archive file responsive to the occurrence of the fist event (the database 14 located in the data storage and protection apparatus 10 retrieves the event log 2) (col.4, lines 40-42); and

Moving the archive to a second storage location responsive to a second event, the second storage location being a permanent storage location (uses the information contained therein to identify data files that are to be transmitted to data file backup media 21 for storage) (col. 4, lines 43-45).

Dunphy does not explicitly creating an archive file from the operating file and storing the archive file in a temporary first storage location temporally proximate to the operation being performed on the operating file and responsive to detecting the instruction. However, Dunphy teaches "if a data file change is detected, at step 34, the data file monitor 11 extracts data file status and activity information from the received communications an uses this data to maintain an event log 12 that indicates a history of

all presently occurring, data file activity on the computer system 1..." (col. 3, lines 49-67 to col. 4, lines 1-21). In addition, Dunphy teaches "the data file monitor 11 creates an entry in event log 2 that identifies the data directory/data file the nature of the change, extent of the data file, the time that is change occurred and any other pertinent administrative information, such as a user identification, that may be pertinent to the operation of the data file storage and protection system 10" (col. 4, lines 33-38). On the other hand, Koshisaka teaches "the file manipulation monitoring section 201 constantly monitors API (Application Program Interface) commands which are outputted by the application 1 to the operating system 3 and thereby detects the file manipulation which is (going to be) executed by the application 1...In the case wherein the file manipulating is "file deletion" ("Yes" in the step S2), the file manipulation monitoring section 21 instructs the processing section 22 to store a "deleted file name" and a corresponding "backup file name" in the deleted file name memory section 23 (step 23). The deleted file name is the name of the file (to be) deleted by the application 1." (col. 6, lines 35-54). This teaches the monitoring program send out the instruction to save the deleted file to the backup memory right at the time the program can execute the delete application. These functionalities in Koshisaka and the current application are the same. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify the teaching of capturing the delete file to the back up memory as taught in Koshisaka in order to allow the user to retrieve latter on when needed. Further more, the both of Koshisaka and Dunphy discloses detecting is done by an API and API is not a part of the Operating System. On the other hand,

Parthasarathy discloses an API is a part of the Operating System (col. 5, lines 59-61). Since, API in Parthasarathy disclosed as a part of the operating system. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify the API of as disclosed in Parthasarathy to detect an instruction performing on as file as Koshisaka and Dunphy to generate a backup for later recovery.

Regarding on claim 35, Dunphy teaches the method recited in claim 34 wherein storing the archive file includes storing the archive file prior to the operation being performed on the operating file (creating a entry in the event log prior executing) (col. 4, lines 30-38).

Regarding on claim 36, Dunphy teaches the method recited in claim 35 wherein storing the archive file includes storing the archive file prior to the operation being performed on the operating file and subsequent to the operation being performed on the operating file (the entries is created based on the change is made to the file and change is made to the file after the intercepting command) (col. 3, lines 36-67).

Regarding on claim 37, Dunphy teaches the method recited in claim 34 wherein storing the archive file includes storing the archive file subsequent to the operation being performed on the operating file.

Regarding on claim 38, Dunphy teaches the method recited in claim 34 wherein the first temporary storage location includes a buffer (log) (col. 4, lines 24-34).

Regarding on claim 43, Dunphy teaches the method recited in claim 34 wherein the second storage location is an output buffer (col. 4, lines 40-45).

Regarding on claim 44, Dunphy teaches the method recited in claim 34 further comprising:

after storing the archive file in the first temporary storage location, updating a database to indicate that the archive file is located in the first storage location (col. 4, lines 25-67);

Determine a final destination for the archive file (col. 4, lines 25-67);

Moving the archive file from the first temporary location to an intermediate storage location (col. 4, lines 25-67);

Updating the database to indicate that the archive file are located in the intermediate storage location (col. 4, lines 25-67); and

After moving the archive file to the second storage location, updating the database to indicate that the archive file is located in the second storage location (col. 4, lines 25-67).

Regarding on claim 45, Dunphy teaches the method recited in claim 44 wherein the second location include a personal attached storage device (backup disk 21) (col. 4, lines 42-44).

Regarding on claim 46, Dunphy teaches the method recited in claim 45 wherein the second storage location includes a network attached storage device (the backup device 20 can be collocated with computer system 1 or can be located remote from computer system 1 and connected thereto via a data communication) (col. 3, lines 30-34).

Regarding on claim 47, Dunphy teaches the method recited in claim 44 wherein the second storage location includes a peer-to-peer storage device (the backup device 20 can be collocated with computer system 1 or can be located remote from computer system 1 and connected thereto via a data communication) (col. 3, lines 30-34).

Regarding on claim 48, Dunphy teaches the method recited in claim 44 wherein the second storage location includes an Internet storage area network (the backup device 20 can be collocated with computer system 1 or can be located remote from computer system 1 and connected thereto via a data communication) (col. 3, lines 30-34).

Claims 49-51 are rejected under the same reason as to claim 44

Regarding on claim 58, Dunphy teaches the method recited in claim 34 wherein the first event is different from said second event (col. 4, lines 24-50).

Regarding on claim 59, Dunphy teaches in a computing device, a method for archiving files comprising:

Detecting an instruction by operating system to perform an operation on an operating file (application program resident on the computer system to intercept all communication therebetween) (col. 1, lines 60-61); and

Storing the archive file in a second storage device (a database 14 located in the storage and protection apparatus 10 retrieves the event log 12 and uses the information contained therein to identify data files that are to be transmitted to a data file backup media 21 for storage) (col. 4, lines 41-44).

Dunphy does not explicitly teach creating an archive file from the operating file and moving the archive file to a first storage device temporally proximate to the operation being performed on the operating file, responsive to detecting the instructions. However, Dunphy teaches "if a data file change is detected, at step 34, the data file monitor 11 extracts data file status and activity information from the received communications an uses this data to maintain an event log 12 that indicates a history of all presently occurring, data file activity on the computer system 1...) (col. 3, lines 49-67 to col. 4, lines 1-21). In addition, Dunphy also teaches "the data file monitor 11 creates an entry in event log 2 that identifies the data directory/data file the nature of the change, extent of the data file, the time that is change occurred and any other pertinent administrative information, such as a user identification, that may be pertinent to the operation of the data file storage and protection system 10" (col. 4, lines 33-38). This suggests that changed instruction is intercepted and an entry log is created and store in the event log. On the other hand, Koshisaka teaches "the file manipulation monitoring section 201 constantly monitors API (Application Program Interface) commands which are outputted by the application 1 to the operating system 3 and thereby detects the file manipulation which is (going to be) executed by the application 1...In the case wherein the file manipulating is "file deletion" ("Yes" in the step S2), the file manipulation monitoring section 21 instructs the processing section 22 to store a "deleted file name" and a corresponding "backup file name" in the deleted file name memory section 23 (step 23). The deleted file name is the name of the file (to be) deleted by the application 1." (col. 6, lines 35-54). This teaches the monitoring program send out the instruction to

save the deleted file to the backup memory right at the time the program can execute the delete application. These functionalities in Koshisaka and the current application are the same. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modifying Dunphy's system to include capturing the delete file to the back up memory as taught in Koshisaka in order to allow the user to retrieve latter on when needed. Further more, the both of Koshisaka and Dunphy discloses detecting is done by an API and API is not a part of the Operating System (col. 5, lines 59-61). On the other hand, Parthasarathy discloses an API is a part of the Operating System. Since, API in Parthasarathy disclosed as a part of the operating system. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify the API of as disclosed in Parthasarathy to detect an instruction performing on as file as Koshisaka and Dunphy to generate a backup for later recovery.

7. Claims 39-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunphy et al. (US. Patent No. 5,638,509) in view Koshisaka (US. Patent No. 6,629,109 B1) and further in view of Parthasarathy et al. (US. Patent No. 7,117,371 B1) and further in view of Midgely et al. (US. Patent No. 5,608,865).

Regarding on claim 39, Dunphy, Koshisaka and Parthasarathy do not explicitly teach the method recited in claim 34 wherein the first event includes message from a timer. However, Midgely teaches "the protected server's protection agent registers with

the Netware file system's File system Monitor feature. This registration requests that the agent be notified when a client a requests a file open operation, prior to the file system's execution of the open operation" (col. 7, lines 59-63). This suggests the notification is the message from a timer. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Dunphy and Koshisaka and Parthasarathy system to include notification as taught by Midgely in order to notify the user the changes that is about to be made to the file to allow the user to take the next appropriate actions.

Regarding on claim 40, Dunphy, Koshisaka and Parthasarathy do not explicitly teach the method recited in claim 34 wherein the first event includes a message from a program resident on the computing device. However, Midgely teaches "the protected server's protection agent registers with the Netware file system's File system Monitor feature. This registration requests that the agent be notified when a client a requests a file open operation, prior to the file system's execution of the open operation" (col. 7, lines 59-63). This suggests the resident program is the agent. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Dunphy, Koshisaka and Parthasarathy system to include an agent as taught by Midgely in order to notify the change that is about to be made to the file to allow the user to take the next appropriate actions.

Regarding on claim 41, Dunphy, Koshisaka and Parthasarathy do not explicitly teach the method recited in claim 34 wherein the second event includes a message

from a timer. However, Midgely teaches "the protected server's protection agent registers with the Netware file system's File system Monitor feature. This registration requests that the agent be notified when a client a requests a file open operation, prior to the file system's execution of the open operation" (col. 7, lines 59-63). This suggests the same concept of notification system. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Dunphy, Koshisaka and Parthasarathy system to include an notification system as taught by Midgely in order to notify the user take appropriate actions.

Regarding on claim 42, Dunphy, Koshisaka and Parthasarathy do not explicitly teach the method recited in claim 34 wherein the second event includes a message indicating when the second storage location is available. However, Midgely teaches "the protected server's protection agent registers with the Netware file system's File system Monitor feature. This registration requests that the agent be notified when a client a requests a file open operation, prior to the file system's execution of the open operation" (col. 7, lines 59-63). This suggests the same concept of notifying when there is enough space for backup. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Dunphy, Koshisaka and Parthasarathy system to include an notification system as taught by Midgely in order to notify the user the space available to store the backup.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baoquoc N. To whose telephone number is at 571-272-4041 or via e-mail BaoquocN.To@uspto.gov. The examiner can normally be reached on Monday-Friday: 8:00 AM – 4:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached at 571-272-4107.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231.

The fax numbers for the organization where this application or proceeding is assigned are as follow:

(571) –273-8300 [Official Communication]

Baoquoc N. To BT
August 31, 2007

John E. Breene
JOHN BREENE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100